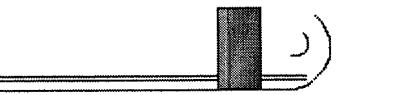


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For a Japanese version (including talks and papers in Japanese), visit at <http://www-ana.nal.ics.es.osaka-u.ac.jp/~murata/index.html>.

Talk and Panel

1. Masayuki Murata, "IP over WDM networks towards the next-generation Internet," Tutorial Talk, *2000 Asia-Pacific Network Operations and Management Symposium (APNOMS 2000)*, October 2000. [\[pdf\]](#)
2. Masayuki Murata, "Network dimensioning of the Internet," Distinguished Experts Panel on "New Management Paradigms and Technologies Towards the Internet Millennium," *2000 Asia-Pacific Network Operations and Management Symposium (APNOMS 2000)*, October 2000.

Publications in Refereed Journals

1. Shingo Ata, Masayuki Murata, and Hideo Miyahara, "Analysis of network traffic and its application to design of high-speed routers," *IEICE Transactions on Information and Systems*, Vol. E83-D, pp. 988-995, May 2000. [\[pdf\]](#)
2. Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "On video coding algorithms with application level QoS guarantees," *Computer Communication Journal*, Vol. 23, pp. 1459-1470, August 2000. [\[pdf\]](#)
3. Shin'ichi Arakawa, Masayuki Murata, Hideo Miyahara, "Functional partitioning for multi-layer survivability in IP over WDM networks," *IEICE Transactions on Communications*, pp. 2224-2233, October 2000. [\[pdf\]](#)
4. Kazuhiro Gokyu, Ken-ichi Baba and Masayuki Murata, "Path accommodation methods for unidirectional rings with optical

compression TDM," *IEICE Transactions on Communications*, Vol. E83-B, pp. 2294-2303, October 2000. [pdf]

5. Masayuki Murata, "Challenges for the next generation Internet and the role of IP over photonic networks," *IEICE Transactions on Communications*, Vol. E83-B, October 2000. [pdf]
6. Go Hasegawa, Masayuki Murata and Hideo Miyahara, "Fairness and stability of congestion control mechanisms of TCP," *Telecommunication Systems Journal*, pp. 167-184, November 2000. [pdf]
7. Doo Seop Eom, Masashi Sugano, Masayuki Murata and Hideo Miyahara, "Performance improvement by packet buffering in Mobile IP based networks," *IEICE Transactions on Communications*, Vol. E83-B, No. 11, pp. 2501-2512, November 2000. [pdf]
8. Go Hasegawa and Masayuki Murata, "Survey on fairness issues in TCP congestion control mechanisms," to appear in *IEICE Transactions on Communications*, January 2001. [pdf]
9. Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "Comparison of VBR and CBR service classes for MPEG-2 video multiplexing - Is statistical multiplexing really useful for bursty video transmission? -," to appear in *International Journal of Communication Systems*, Vol. 14, March 2001. [pdf]
10. Kazumine Matoba, Shingo Ata, and Masayuki Murata, "Improving accuracy of bandwidth estimation for Internet links by statistical methods," to appear in *IEICE Transactions on Communications*, June 2001. [pdf] (CONSIDERED)
11. Atsushi Nagate, Masashi Sugano, Masayuki Murata and Hideo Miyahara, "Impact of limited number of wired channels on soft handoff in CDMA cellular systems," to appear in *IEICE Transaction on Communications*, Vol. E84-B, March 2001. [pdf]
12. Kouhei Fujimoto, Shingo Ata, and Masayuki Murata, "Statistical analysis of packet delays in the Internet and its application to playout control for streaming applications," to appear in *IEICE Transactions on Communications*, June 2001. [pdf]
13. Go Hasegawa, Takahiro Matsuo, Masayuki Murata and Hideo Miyahara, "Comparisons of packet scheduling algorithms for fair service among connections on the Internet," submitted to *Journal on High Speed Network*, April 2000. [pdf]
14. Hiroyuki Ohsaki, Masayuki Murata, Toshimitsu Ushio, and Hideo Miyahara, "A control theoretical analysis of a window-based flow control mechanism in TCP/IP networks," submitted to *IEEE Transactions on Control Systems Technology*, August 2000. [pdf]
15. Hiroyuki Ohsaki, Masayuki Murata, and Hideo Miyahara,

"Application of control theory to a window-based flow control mechanism with ECN routers," submitted to *Performance Evaluation*, August 2000. [pdf]

16. Masayuki Murata, Ken-ichi Kitayama and Hideo Miyahara, "IP over a-thousand-wavelength division multiplexing: Is it useful and possible for resolving the network bottlenecks?", submitted to *Optical Networks Magazine*, November 2000. [pdf]
17. Kazuhiro Gokyu, Ken-ichi Baba and Masayuki Murata, "Path accommodation methods for bidirectional rings with optical compression TDM," submitted to *ACM Transactions on Optical Networks and Systems (TONS)*, May 2000. [pdf]
18. Kazuhiro Gokyu, Ken-ichi Baba and Masayuki Murata, "Scheduling algorithm for uniform/nonuniform traffic in unidirectional optical compression TDM/WDM rings with tuning latency," submitted to *ACM Transactions on Optical Networks and Systems (TONS)*, January 2001. [pdf]
19. Masayuki Murata and Ken-ichi Kitayama, "A perspective on photonic multi-protocol label switching," submitted to *IEEE Network Magazine*, November 2000. [pdf]
20. Hector Akamine, Naoki Wakamiya and Hideo Miyahara, "Heterogeneous Video Multicast in an Active Network," submitted to *IEICE Transactions on Communications*, January 2001. [pdf]
21. Junichi Katou, Shin'ichi Arakawa, and Masayuki Murata, "A Design Method of Logical Topology with Stable Packet Routing in {IP} over WDM Network," submitted to *IEEE Journal on Selected Areas in Communications*, February 2001. [pdf]
22. Masayuki Murata and Ken-ichi Kitayama, "Photonic Label Switch Supporting Asynchronous and Variable-Length," submitted to *IEEE Journal on Selected Areas in Communications*, February 2001. [pdf]

Publications in International Conference Proceedings

1. Masayuki Murata, "Reliability issues in IP over WDM networks," *2000 International Workshop on Telecommunications: World Class Quality & Reliability for World Class Events*, April 2000. [pdf]
2. Naoki Wakamiya and Masayuki Murata and Hideo Miyahara, "On TCP-friendly video transfer with consideration on application-level QoS," in *Proceedings of IEEE International Conference on Multimedia & EXPO*, Vol. 2, (New York), pp. 843-846, July 2000. [pdf]
3. Masaki Miyabayashi, Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "Implementation of video transfer with TCP-

friendly rate control protocol," in *Proceedings of International Technical Conference on Circuits/Systems, Computers and Communications (ITC-CSCC 2000)*, (Pusan), pp. 117-120, July 2000. [\[pdf\]](#)

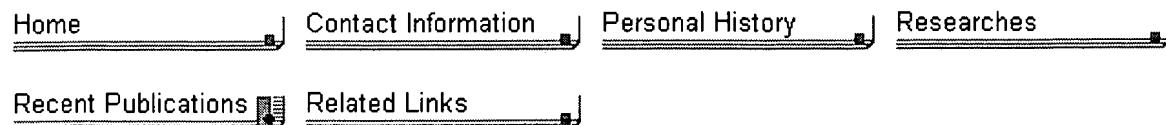
4. Takahiro Matsuo, Go Hasegawa and Masayuki Murata, "Scalable automatic buffer tuning to provide high performance and fair service for TCP connections," in *Proceedings of INET 2000*, July 2000. [\[pdf\]](#)
5. Keiichi Takagaki, Hiroyuki Ohsaki and Masayuki Murata, "Stability analysis of a window-based flow control mechanism for TCP connections with different propagation delays," in *Proceedings of INET 2000*, (Yokohama), July 2000. [\[pdf\]](#)
6. Kenji Kurata, Go Hasegawa, Masayuki Murata, "Fairness comparisons between TCP Reno and TCP Vegas for future deployment of TCP Vegas," in *Proceedings of INET 2000*, July 2000. [\[pdf\]](#)
7. Hector Akamine, Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "On the construction of heterogeneous multicast distribution trees using filtering in an active network," in *Proceedings of Quality of future Internet Services Workshop (QofIS 2000)*, (Berlin), pp. 272-284, September 2000. [\[pdf\]](#)
8. Kazumine Matoba, Shingo Ata, and Masayuki Murata, "Improving accuracy of bandwidth estimation for Internet links by statistical methods," in *Proceedings of 13th ITC Specialist Seminar*, pp. 29.1-29.10, September 2000. [\[pdf\]](#)
9. Atsushi Nagate, Masashi Sugano, Masayuki Murata and Hideo Miyahara, "An integrated approach for performance modeling and evaluation of soft handoff in CDMA mobile cellular systems," in *Proceedings of VTC Fall 2000*, (Boston), September 2000. [\[pdf\]](#)
10. Atsushi Nagate, Masashi Sugano, Masayuki Murata and Hideo Miyahara, "The effect of three-way soft handoff for integrated evaluation in CDMA mobile cellular systems," in *Proceedings of APCC 2000*, (Seoul), pp. 617-621, October-November 2000. [\[pdf\]](#)
11. Hector Akamine, Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "An approach for heterogeneous video multicast using active networking," in *Proceedings of Second International Working Conference on Active Networks (IWAN 2000)*, (Tokyo), pp. 157-170, October 2000. [\[pdf\]](#)
12. Kazuhiro Gokyu, Ken-ichi Baba and Masayuki Murata, "Path setup algorithms for uniform/nonuniform traffic in unidirectional optical compression TDM rings," in *Proceedings of SPIE Opticomm 2000*, pp. 98-109, October 2000. [\[pdf\]](#)
13. Shin'ichi Arakawa, Masayuki Murata, Hideo Miyahara, "Design methods of multi-layer survivability in IP over WDM networks," in *Proceedings of OptiComm 2000*, pp. 279-290, October 2000.

[\[pdf\]](#)

14. Taketo Yamashita, Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "Implementation and evaluation of integrated resource allocation scheme for real-time video transfer to maximize users' utility," in *Proceedings of APCC 2000*, (Seoul), pp. 390-394, October-November 2000. [\[pdf\]](#)
15. Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "TCP-friendly video transfer," in *Proceedings of SPIE International Symposium on Information Technologies 2000*, (Boston), November 2000. [\[pdf\]](#)
16. Go Hasegawa, Kenji Kurata and Masayuki Murata, "Analysis and improvement of fairness between TCP Reno and Vegas for deployment of TCP Vegas to the Internet," in *Proceedings of IEEE International Conference on Network Protocols (ICNP) 2000*, pp. 177-186, November 2000. [\[pdf\]](#)
17. Masashi Sugano, Tsutomu Araki, Masayuki Murata, Takaaki Hatauchi and Yohei Hosooka, "Performance evaluation of a wireless ad hoc network: Flexible Radio Network (FRN)," in *Proceedings of 2000 IEEE International Conference on Personal Wireless Communications*, (Hyderabad), pp. 350-354, December 2000. [\[pdf\]](#)
18. Junichi Katou, Shin'ichi Arakawa, and Masayuki Murata, "A design method of logical topology for IP over WDM networks with stable routing," to be presented at *The Fifth Working Conference on Optical Network Design and Modeling*, February 2001. [\[pdf\]](#)
19. Ken-ichi Kitayama and Masayuki Murata, "Packet-selective photonic add/drop multiplexer and its application to ultrahigh-speed optical data networking in LAN and MAN," to be presented at *The Fifth Working Conference on Optical Network Design and Modeling*, February 2001. [\[pdf\]](#)
20. Masaki Miyabayashi, Naoki Wakamiya, Masayuki Murata and Hideo Miyahara, "MPEG-TFRCP: Video transfer with TCP-friendly rate control protocol," to be presented at *IEEE International Conference on Communications 2001 (ICC 2001)*, June 2001. [\[pdf\]](#)
21. Shingo Ata, Masayuki Murata, and Hideo Miyahara, "Efficient cache structures of IP routers to provide policy-based services," to be presented at *IEEE ICC 2001*, June 2001. [\[pdf\]](#)
22. Keiichi Takagaki, Hiroyuki Ohsaki and Masayuki Murata, "Analysis of a window-based flow control mechanism based on TCP Vegas in heterogeneous network environment," to be presented at *IEEE ICC 2001*, June 2001. [\[pdf\]](#)
23. Kouhei Fujimoto, Shingo Ata, and Masayuki Murata, "Playout control for streaming applications by statistical delay analysis," to be presented at *IEEE International Conference on*

Communications 2001 (ICC 2001), June 2001. [pdf]

24. Masahiro Miyoshi, Masashi Sugano and Masayuki Murata, "Performance evaluation of TCP throughput on wireless cellular networks," to be presented at *IEEE VTC 2001 Spring*, May 2001. [pdf]
25. Go Hasegawa, Tatsuhiko Terai and Masayuki Murata, "Scalable socket buffer tuning for high-performance Web servers," submitted to *ACM SIGCOMM 2001*, January 2001. [pdf]
26. Hiroyuki Ohsaki, Yuichiro Mera, Masayuki Murata, and Hideo Miyahara, "Steady state analysis of the RED gateway: stability, transient behavior, and parameter setting," submitted to *ACM SIGMETRICS 2001/PERFORMANCE 2001*, November 2000. [pdf]
27. Ikutaro Ogushi, Shin'ichi Arakawa, Masayuki Murata and Ken-ichi Kitayama, "Parallel reservation protocols for achieving fairness in optical burst switching," submitted to *IEEE Workshop on High Performance Switching and Routing*, November 2000. [pdf]
28. Tatsuhiko Terai, Takuya Okamoto, Go Hasegawa and Masayuki Murata, "Implementation of dynamic socket buffer assignment mechanism for high-performance Web servers," submitted to *SPIE ITCom 2001*, February 2001. [pdf]
29. Go Hasegawa and Masayuki Murata, "The dynamic threshold control algorithm of RED for thousands of TCP flows," submitted to *SPIE ITCom 2001*, February 2001. [pdf]
30. Ichinoshin Maki, Hideyuki Shimonishi, Masayuki Murata and Hideo Miyahara, "Hierarchically aggregated fair queueing for per-flow fair bandwidth sharing in high-speed backbone networks," submitted to *SPIE ITCom 2001*, February 2001. [pdf]
31. Masahiro Sasabe, Naoki Wakamiya, Masayuki Murata, and Hideo Miyahara, "Proxy Caching Mechanisms with Video Quality Adjustment," submitted to *SPIE ITCom 2001*, February 2001. [pdf]
32. Hiroyuki Ohsaki, Masayuki Murata, and Hideo Miyahara, "Modeling end-to-end packet delay dynamics of the Internet using system identification," submitted to *International Teletraffic Congress 17*, January 2001. [pdf]
33. Hiroyuki Ohsaki, Keiichi Takagaki, and Masayuki Murata, "A control theoretical analysis of a window-based flow control mechanism for TCP connections with different propagation delays," submitted to *SPIE's International Symposium on the Convergence of Information Technologies and Communications*, February 2001.



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